## **EXHIBIT 11**

## (CONCEPTUAL WETLAND MITIGATION PLAN)



Information Only
Project: USH 51 Files and EA Exhibit 1-089.127, WisDOT ID 1166-02-00

## **MEMORANDUM**

TO: Janet Smith, WisDOT District 4 - Environmental Coordinator

Chris Saxby (Environmental Document and Impact Minimization)

Jo Schuster (Stormwater Management Plan coordination) Sue Barker (PM West Arterial Project, EMCS) and Files

FROM: Jim McCarthy, Environmental Scientist

DATE: August 30, 2002 (with 11/14/02 West Arterial Project Notations)

RE: Conceptual Wetland Mitigation Example – Abbreviated Draft Memo and Plan View

Provided for District and EA Coordination Use

I39/USH 51/STH 29 Corridor and West Arterial Project WisDOT I.D. 1166-00-00, 1166-02-00, and 6675-00-00

Provided below is an abbreviated summary of an example conceptual wetland mitigation option for the project. The attached plan view Exhibit provides a graphic representation of the example area. In this example we include some components of restoration, enhancement, and creation within an area of DOT ownership at the STH 29 East Interchange. Marathon County and resource agencies have also been evaluating how to address stormwater management and siltation in the adjoining natural wetland corridor along Trillium Lane in this area. This example would add to the existing wetland corridor and would not involve dredging of the existing riparian environment. It would also provide for a large forested lowland replacement area on an old borrow pit southeast of USH 51 and STH-29 East.

This information is being provided to you for general overview and for use in the environmental assessment for the USH 51/STH 29 West Interchange Project from Mallard Lane to West Bridge Street (I.D. 1166-02-00). The impacts of this and other Wausau area projects are provided in separate documents. Our detailed Wetland Compensation Plan letter will be provided to you in a draft format under separate cover. After review by the department, it could be shared with resource agencies to document planned wetland, floodplain, and habitat mitigation efforts.

We have used this example area for demonstration of wetland mitigation options that use an ecological and cost-effective method to integrate road construction and borrow needs, stormwater and floodplain concerns, and wetland mitigation. The following are some detailed reasons for the proposed example:

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## Reasons for Considering Integrated Wetland Mitigation Consolidation Site

- Availability of surplus DOT lands near the STH 29 East Interchange.
- Need for 1 million cubic yards (CY) and 2 million CY of borrow for the north and south USH 51 project areas, respectively.
- The increase in over 26 acres of impervious areas for the south project area.
- Need for providing 110 to 200-acre-feet of stormwater or floodplain storage.
- Need for wetland mitigation of approximately 11 to 16 acres of USH 51 related and a total of 37 to 42 acres of impacts for the cumulative total Wausau roadway and stormwater project area.

Any selected wetland mitigation area (including traditional restoration, enhancement, and creation) will employ the following techniques to maximize the quality of the mitigation site and surrounding natural environment in the project area.

- Segregate or otherwise address purple loosestrife and spotted knapweed control.
- Emphasize reestablishment of red-flag forested lowlands.
- Maximize stem-flow, infiltration, and soil storage of rainfall and runoff.
- Utilize old borrow sites to minimize additional loss of habitat in Wausau area.
- Utilize hydraulic inputs and groundwater recharge efforts of new detention areas.
- Maintain or increase forested land-cover types to both increase rainfall interception infiltration while providing replacement environmental corridors for wildlife.
- Provide complimentary features to single purpose stormwater management features.
- Increase soil infiltration and aquifer recharge while protecting or enhancing drainageway corridors to provide groundwater recharge and create environmental corridors or buffers to development.

The draft Wetland Compensation Plan letter will describe additional sites where the above-described mitigation options and components can be employed. We hope to provide a minimum of two sites for the various options (restoration, enhancement, and creation). We will provide this letter to the department prior to our September 18, 2002, field review with you.

Thank you for allowing us to assist the District in the mitigation needs of the I39/USH 51/STH-29 Wausau project. Please contact me if you have questions regarding the information provided. Thanks!

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